followed by a letter from me to all the Hon'ble M.Ps.

Satellites launched in INSAT series

2579. SHRI BHAGABAN MAJHI: Will the PRIME MINISTER be pleased to state:

(a) the number of satellites in the INSAT series launched by Government, so far;

(b) whether Government have a proposal to launch INSAT-2E and INSAT-3A;

(c) if so, when and the number of transponders the country will have by the year 2001; and

(d) the details of the satellites expected to be launched by then?

THE MINISTER OF STATE IN THE MINISTRY OF EXTERNAL AFFAIRS (SHRIMATI VASUNDHARA RAJE): (a) The number of Indian National Satellites (INSAT) launched so far is eight.

(b) and (c) Yes, Sir. INSAT-2E is slated for launch in November/December 1998 and the third generation INSAT satellite i.e., INSAT-3A, 3B, 3C and 3D are slated for launch in the 1999-2002 time frame. After INSAT-2E, INSAT-3A, 3B and 3C are launched successfully, the number of transponders that will be available by the year 2001 is about 100.

(d) By 2001, INSAT-2B, 2C (already launched), 2E, 3A, 3B & 3C (to be launched) will be available for operational use in orbit.

Satellite Launch Vehicle for commercial purpose

2580. DR. ALLADI P. RAJKUMAR: Will the PRIME MINISTER be pleased Jo state:

(a) whether the Department of Space are offering their Satellite Launch Vehicle on commercial basis;

(b) if so, the details of the prospective customer countries who have desired to avail of these services and the annual revenue likely to be earned during the next three years; and

(c) the countries with whom India is a competitor for providing these commercial services?

THE MINISTER OF STATE IN THE MINISTRY OF EXTERNAL AFFAIRS (SHRIMATI VASUNDHARA RAJE): (a) Yes, Sir.

(b) Antrix, the Commercial wing of Department of Space has, on behalf of ISRO, signed Launch Services Agreements with Republic of Korea for launching a *100* kg. KITSAT-3 micro satellite and with German Space Agency (DLR) for launching a 45 kg. DLR-TUBSAT micro satellite in Polar Satellite Launch Vehicle-C2 (PSLV-C2) mission as auxiliary payloads. The primary satellite will be the Indian Remote Sensing Satellite, IRS-P4. Also, an agreement is signed with Verhaert Design & Development n.v., Belgium for launching a 100 kg. micro satellite, PROBA along with IRS satellite in a later flight.

So far the contracts signed have been only for small satellite weighing less than 100 kg.

ISRO has been receiving enquiries from a number of countries for launching micro and mini satellite. This includes USA, Asian and the European countries.

For the above mentioned three contracts already signed for auxiliary payload services and similar contracts which are under consideration, the approximate revenue likely to be earned in the next three years is about US$ 3 Million.

(c) The launch service providers are USA, Europe, Russia, China and Japan.